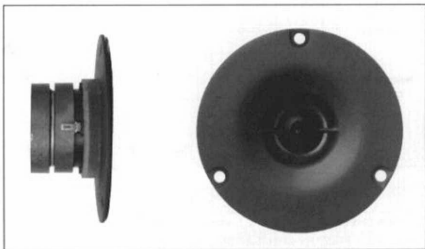


## 14 mm SHIELDED POLYMER DOME

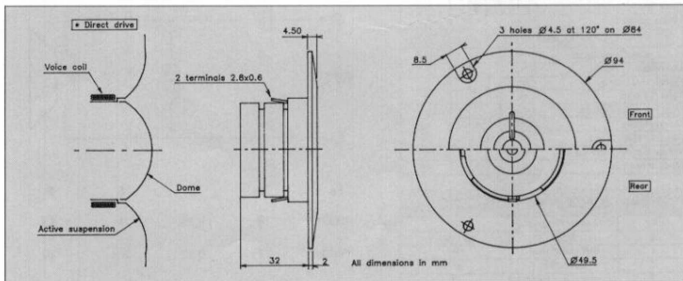
97 dB ultra high efficiency *direct drive*\*  
 Professional application  
 Ferrofluid - cooled voice coil  
 High power handling capability  
 High dynamic characteristics  
 Double magnet structure

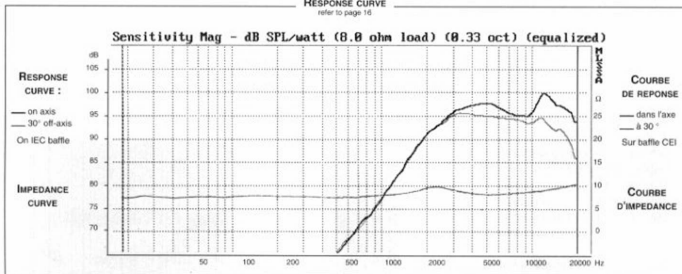
Application professionnelle  
 Concept *direct drive*\*  
 Très haut rendement - 97 dB  
 Bobine refroidie par ferrofluide  
 Puissance admissible importante  
 Grande capacité dynamique



The optimized profile of its horn load coupled with a double magnet system makes it suitable for professional use. Compact, 14 mm polymer dome tweeter. Ultra light moving parts with the voice coil directly wound onto the diaphragm according to the "direct drive" concept. The perfect transfer of energy is the source of its musical qualities, high definition and ultra high efficiency. The voice coil wound onto the high temperature polymer is cooled with ferrofluid for high power handling. A double magnet system makes it ideally suited for audio-video and multi-media systems. Easily coupled with 2nd order crossover as shown Fig 1. Two crossover points are suggested for adequate power handling.

Le profil optimisé du pavillon associé au système magnétique double ferrite situe ce dôme de 14 mm dans la catégorie des utilisations professionnelles. Il doit la légèreté de son équipement mobile à son concept "direct drive" par lequel la bobine est réalisée directement sur le diaphragme. Le parfait transfert d'énergie est à l'origine de ses qualités musicales, de sa haute définition et de son haut rendement. Le concept "direct drive" couplé à la bobine refroidie par ferrofluide lui confère une puissance admissible importante dans sa catégorie. Doté d'une contre-ferrite (applications audio/vidéo) la concentration du champ magnétique augmente sensiblement son rendement. Il peut être filtré au second ordre (12 dB/Oct) selon le schéma Fig 1. Deux fréquences de coupure sont proposées afin d'obtenir la tenue en puissance adéquate.



RESPONSE CURVE  
 refer to page 16


## SPECIFICATIONS

Technical Characteristics	Symbol	Value	Units
---------------------------	--------	-------	-------

### PRIMARY APPLICATION

Nominal Impedance	Z	8	$\Omega$
Resonance Frequency	Fs	2050	Hz
Nominal Power Handling	P	45	W
Sensitivity	E	97	dB

### VOICE COIL

Voice coil diameter	$\varnothing$	14	mm
Minimum Impedance	Zmin	7,2	$\Omega$
DC Resistance	Re	5,7	$\Omega$
Voice Coil Inductance	Lbm	34	$\mu$ H
Voice coil Length	h	2	mm
Former	-	Polymer	-
Number of layers	n	2	-

### MAGNET

Magnet dimensions	$\varnothing$ x h	2 (45 x 9)	mm
Magnet weight	m	0,106	kg
Flux density	B	1,8	T
Force factor	BL	2,4	NA
Height of magnetic gap	He	1,5	mm
Stray flux	Fmag	30	Am <sup>2</sup>
Linear excursion	Xmax	$\pm 0,25$	mm

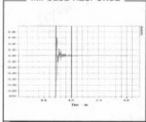
### PARAMETERS

Suspension Compliance	Cms	-	mN <sup>-1</sup>
Mechanical Q Factor	Qms	-	-
Electrical Q Factor	Qes	-	-
Total Q Factor	Qts	-	-
Mechanical Resistance	Rms	-	kg s <sup>-1</sup>
Moving Mass	Mms	0,19.10 <sup>-3</sup>	kg
Effective Piston Area	S	6,6.10 <sup>-1</sup>	m <sup>2</sup>
Volume Equivalent of Air at Cas	Vas	-	m <sup>3</sup>
Mass of speaker	M	0,17	kg

## APPLICATION PARAMETERS

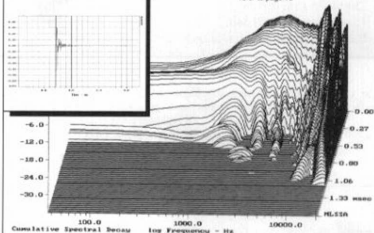
Fc	Crossover Frequency	Hz
S	Slope	dB / Oct.
L	Self-inductance	mH
C	Capacitor	$\mu$ F
P	Nominal Power Handling	W

### IMPULSE RESPONSE



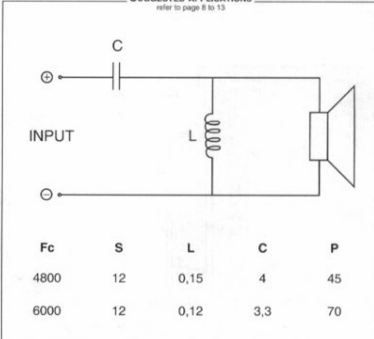
### WATERFALL

refer to page 16



### SUGGESTED APPLICATIONS

refer to page 8 to 13



Please refer to method of measurement and measurement conditions pages 15 to 19.

Audax may, without prior notification modify the specifications on its products further to research and development requirements.